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============================================================
Sequence Listing was accepted.
If you need help call the Patent Electronic Business Center at (866)
217-9197 (toll free).
Reviewer: markspencer
Timestamp: [year=2008; month=12; day=2; hr=15; min=52; sec=40; ms=61; ]
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Application No:          10797035          Version No:          3.0


Input Set:


Output Set:



Started:     2008-10-31 15:32:40.002
Finished:    2008-10-31 15:32:55.315
Elapsed:     0 hr(s) 0 min(s) 15 sec(s) 313 ms
Total Warnings:     38
Total Errors:       0
No. of SeqIDs Defined:     46
Actual SeqID Count:     46

Error code          Error Description

W   213          Artificial or Unknown found in <213>  in SEQ ID (3)

W   213          Artificial or Unknown found in <213>  in SEQ ID (4)

W   213          Artificial or Unknown found in <213>  in SEQ ID (5)

W   213          Artificial or Unknown found in <213>  in SEQ ID (6)

W   213          Artificial or Unknown found in <213>  in SEQ ID (7)

W   213          Artificial or Unknown found in <213>  in SEQ ID (8)

W   213          Artificial or Unknown found in <213>  in SEQ ID (9)

W   213          Artificial or Unknown found in <213>  in SEQ ID (10)

W   213          Artificial or Unknown found in <213>  in SEQ ID (11)

W   213          Artificial or Unknown found in <213>  in SEQ ID (12)

W   213          Artificial or Unknown found in <213>  in SEQ ID (13)

W   213          Artificial or Unknown found in <213>  in SEQ ID (14)

W   213          Artificial or Unknown found in <213>  in SEQ ID (15)

W   213          Artificial or Unknown found in <213>  in SEQ ID (16)

W   213          Artificial or Unknown found in <213>  in SEQ ID (17)

W   213          Artificial or Unknown found in <213>  in SEQ ID (18)

W   213          Artificial or Unknown found in <213>  in SEQ ID (19)

W   213          Artificial or Unknown found in <213>  in SEQ ID (20)

W   213          Artificial or Unknown found in <213>  in SEQ ID (21)

W   213          Artificial or Unknown found in <213>  in SEQ ID (22)

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              Input Set:


             Output Set:



                Started:   2008-10-31 15:32:40.002
               Finished:   2008-10-31 15:32:55.315
                Elapsed:   0 hr(s) 0 min(s) 15 sec(s) 313 ms
        Total Warnings:    38
          Total Errors:    0
  No. of SeqIDs Defined:   46
     Actual SeqID Count:   46
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| Error code | Error Description |
| --- | --- |
| | This error has occured more than 20 times, will not be displayed |
| W 402 | Undefined organism found in <213> in SEQ ID (40) |
| W 402 | Undefined organism found in <213> in SEQ ID (45) |

<210> 1
<211> 645
<212> DNA
<213> Arabidopsis thaliana

<400> 1
atggttgtga aactatatgg acaggtaaca gcagcttgtc cacaaagagt cttgctttgt        60

tttctcgaga aaggaattga atttgagatt attcatatcg atcttgatac atttgagcaa       120

aaaaaaccag aacatcttct tcgtcagcca tttggtcaag ttccagccat agaagatgga       180

gatttcaagc tttttgaatc acgagccatc gcgagatact acgctaccaa gttcgcggac       240

caaggcacga acctttttggg caagtctcta gagcaccgag ccatcgtgga ccagtgggct       300

gacgtggaga cctattactt caacgttctg gcccaacccc tcgtgattaa cctaatcatc       360

aagcctaggt taggcgagaa atgtgacgtc gttttggtcg aggatctcaa agtgaagcta       420

ggagtggtct tggacatata caataaccgg ctttcttcga accggttttt ggctggtgaa       480

gaattcacta tggctgattt gacgcacatg ccggcgatgg ggtacttgat gagtataacc       540

gatataaacc agatggttaa ggctcggggt agttttaacc ggtggtggga agagatttcg       600

gatagaccgt cttggaagaa gcttatggtg ctggctggtc actga                       645


<210> 2
<211> 214
<212> PRT
<213> Arabidopsis thaliana

<400> 2
Met Val Val Lys Leu Tyr Gly Gln Val Thr Ala Ala Cys Pro Gln Arg
1               5                   10                  15

Val Leu Leu Cys Phe Leu Glu Lys Gly Ile Glu Phe Glu Ile Ile His
          20                  25                  30

Ile Asp Leu Asp Thr Phe Glu Gln Lys Lys Pro Glu His Leu Leu Arg
          35                  40                  45

Gln Pro Phe Gly Gln Val Pro Ala Ile Glu Asp Gly Asp Phe Lys Leu
          50                  55                  60

Phe Glu Ser Arg Ala Ile Ala Arg Tyr Tyr Ala Thr Lys Phe Ala Asp
65                  70                  75                  80

Gln Gly Thr Asn Leu Leu Gly Lys Ser Leu Glu His Arg Ala Ile Val
                    85                  90                  95

Asp Gln Trp Ala Asp Val Glu Thr Tyr Tyr Phe Asn Val Leu Ala Gln
              100                 105                 110

Pro Leu Val Ile Asn Leu Ile Ile Lys Pro Arg Leu Gly Glu Lys Cys
          115                 120                 125

Asp Val Val Leu Val Glu Asp Leu Lys Val Lys Leu Gly Val Val Leu
          130                 135                 140

Asp Ile Tyr Asn Asn Arg Leu Ser Ser Asn Arg Phe Leu Ala Gly Glu
145                 150                 155                 160

Glu Phe Thr Met Ala Asp Leu Thr His Met Pro Ala Met Gly Tyr Leu
              165                 170                 175

Met Ser Ile Thr Asp Ile Asn Gln Met Val Lys Ala Arg Gly Ser Phe
              180                 185                 190

Asn Arg Trp Trp Glu Glu Ile Ser Asp Arg Pro Ser Trp Lys Lys Leu
          195                 200                 205

Met Val Leu Ala Gly His
    210


<210> 3
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
     primer

<400> 3
gagaaccccca aaaacgtcac                                          20


<210> 4
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
     primer

<400> 4
gttgtgaggg ttgggtagaa                                           20


<210> 5
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
     primer

<400> 5
gtggttgttg ggaagagaag                                           20


<210> 6
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
     primer

<400> 6
cgatggctcg tgattcttag                                           20


<210> 7
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
     primer

<400> 7
ggtcaagttc cagccataga                                        20


<210> 8
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
     primer

<400> 8
agcgagagga aagtggaaca                                        20


<210> 9
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
     primer

<400> 9
ccctcattag gccaagagaa                                        20


<210> 10
<211> 20
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
     primer

<400> 10
gagcttatgt ggggaaagtc                                        20


<210> 11
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
     primer

<400> 11
atcaagtacc ccatcgccgg catgt                                  25


<210> 12

<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
     primer

<400> 12
ggcatgtgcg tcaaatcagc catag                                          25


<210> 13
<211> 25
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
     primer

<400> 13
aaccggttcg aagaaagccg gttat                                          25


<210> 14
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
     primer

<400> 14
atatggacag gtaacagcag cttgtc                                         26


<210> 15
<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
     primer

<400> 15
gcagcttgtc cacaaagagt cttgct                                         26


<210> 16
<211> 26
<212> DNA
<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence: Synthetic
     primer

<400> 16
gctttgtttt ctcgagaaag gaattg                                    26


<210> 17
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
     primer

<400> 17
gacgtcacat ttctcgccta acct                                      24


<210> 18
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
     primer

<400> 18
gaggggttgg gccagaacgt tgaa                                      24


<210> 19
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
     primer

<400> 19
cgatggctcg gtgctctaga gact                                      24


<210> 20
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
     primer


<220>

<221> modified_base
<222> (1)..(1)
<223> a, c, g or t


<220>
<221> modified_base
<222> (11)..(11)
<223> a, c, g or t


<400> 20
ngtcgaswga nawgaa                                                    16



<210> 21
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer


<220>
<221> modified_base
<222> (5)..(5)
<223> a, c, g or t

<220>
<221> modified_base
<222> (10)..(10)
<223> a, c, g or t

<220>
<221> modified_base
<222> (13)..(13)
<223> a, c, g or t

<400> 21
wgtgnagwan canaga                                                    16



<210> 22
<211> 16
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer


<220>
<221> modified_base
<222> (3)..(3)
<223> a, c, g or t

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<220>
<221> modified_base
<222> (11)..(11)
<223> a, c, g or t

<400> 22
gtncgaswca nawgtt                                        16


<210> 23
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer

<400> 23
gaacatcttc ttcgtcagcc atttggtcaa                         30


<210> 24
<211> 30
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer

<400> 24
ggttcttcag atcatcataa attggagcta                         30


<210> 25
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer

<400> 25
atggctggtg cttcttcttt gg                                 22


<210> 26
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer
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<400> 26
tctctccgac agatgtgtca gg                                    22


<210> 27
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer

<400> 27
catggcaact ctatttctca c                                     21


<210> 28
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer

<400> 28
cgtcaccgtc aagatcagtt cc                                    22


<210> 29
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer

<400> 29
atggttagtc agaaagagac cg                                    22


<210> 30
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer

<400> 30
gacacgaaat acatccatcc tg                                    22


<210> 31

<211> 26
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer

<400> 31
ctcaacaatg tcttcatcca acgcct                                    26


<210> 32
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer

<400> 32
cgaaaacgca accgtaagag ag                                        22


<210> 33
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer

<400> 33
gccggagagt ctaagctcaa ct                                        22


<210> 34
<211> 22
<212> DNA
<213> Artificial Sequence

<220>
<223> Description of Artificial Sequence: Synthetic
      primer

<400> 34
ccacggcctg atgatcagca tt                                        22


<210> 35
<211> 22
<212> DNA
<213> Artificial Sequence

<220>

<400> 35
gatggttgcg gttgaaagag tt                                              22


<210> 36
<211> 22
<212> DNA
<213> Artificial Sequence

<220>

<400> 36
aaagcgctta catcggtgtg ag                                              22


<210> 37
<211> 26
<212> DNA
<213> Artificial Sequence

<220>

<400> 37
ggatccatgg ttgtgaaagt gcatgg                                          26


<210> 38
<211> 26
<212> DNA
<213> Artificial Sequence

<220>

<400> 38
gagctcgtcc cgtactccac aacaat                                          26


<210> 39
<211> 214
<212> PRT
<213> Arabidopsis thaliana

<400> 39
Met Val Val Lys Val Tyr Gly Gln Ile Lys Ala Ala Asn Pro Gln Arg
1               5                   10                  15


Val Leu Leu Cys Phe Leu Glu Lys Asp Ile Glu Phe Glu Val Ile His

Val Asp Leu Asp Lys Leu Glu Gln Lys Lys Pro Gln His Leu Leu Arg
              35                      40                      45

Gln Pro Phe Gly Gln Val Pro Ala Ile Glu Asp Gly Tyr Leu Lys Leu
          50                      55                      60

Phe Glu Ser Arg Ala Ile Ala Arg Tyr Tyr Ala Thr Lys Tyr Ala Asp
65                      70                      75                      80

Gln Gly Thr Asp Leu Leu Gly Lys Thr Leu Glu Gly Arg Ala Ile Val
              85                      90                      95

Asp Gln Trp Val Glu Val Glu Asn Asn Tyr Phe Tyr Ala Val Ala Leu
              100                     105                     110

Pro Leu Val Met Asn Val Val Phe Lys Pro Lys Ser Gly Lys Pro Cys
          115                     120                     125

Asp Val Ala Leu Val Glu Glu Leu Lys Val Lys Phe Asp Lys Val Leu
          130                     135                     140

Asp Val Tyr Glu Asn Arg Leu Ala Thr Asn Arg Tyr Leu Gly Gly Asp
145                     150                     155                     160

Glu Phe Thr Leu Ala Asp Leu Ser His Met Pro Gly Met Arg Tyr Ile
              165                     170                     175

Met Asn Glu Thr Ser Leu Ser Gly Leu Val Thr Ser Arg Glu Asn Leu
          180                     185                     190

Asn Arg Trp Trp Asn Glu Ile Ser Ala Arg Pro Ala Trp Lys Lys Leu
          195                     200                     205

Met Glu Leu Ala Ala Tyr
    210

<210> 40
<211> 232
<212> PRT
<213> Petunia sp.

<400> 40

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Met Val Val Lys Val His Gly Ser Ala Met Ala Ala Cys Pro Gln Arg
1               5               10              15

Val Met Val Cys Leu Ile Glu Leu Gly Val Asp Phe Glu Leu Ile His
        20              25              30

Val Asp Leu Asp Ser Leu Glu Gln Lys Lys Pro Glu Phe Leu Val Leu
        35              40              45

Gln Pro Phe Gly Gln Val Pro Val Ile Glu Asp Gly Asp Phe Arg Leu
        50              55              60

Phe Glu Ser Arg Ala Ile Ile Arg Tyr Tyr Ala Ala Lys Tyr Glu Val
65              70              75              80

Lys Gly Ser Lys Leu Thr Gly Thr Thr Leu Glu Glu Lys Ala Leu Val
        85              90              95

Asp Gln Trp Leu Glu Val Glu Ser Asn Asn Tyr Asn Asp Leu Val Tyr
        100             105             110

Asn Met Val Leu Gln Leu Leu Val Phe Pro Lys Met Gly Gln Thr Ser
        115             120             125

Asp Leu Thr Leu Val Thr Lys Cys Ala Asn Lys Leu Glu Asn Val Phe
        130             135             140

Asp Ile Tyr Glu Gln Arg Leu Ser Lys Ser Lys Tyr Leu Ala Gly Glu
145             150             155             160

Phe Phe Ser Leu Ala Asp Leu Ser His Leu Pro Ser Leu Arg Phe Leu
        165             170             175

Met Asn Glu Gly Gly Phe Ser His Leu Val Thr Lys Arg Lys Cys Leu
        180             185             190

His Glu Trp Tyr Leu Asp Ile Ser Ser Arg Asp Ser Trp Lys Lys Val
        195             200             205

Leu Asp Leu Met Met Lys Lys Ile Ser Glu Ile Glu Ala Val Ser Ile
        210             215             220

Pro Ala Lys Glu Glu Ala Lys Val
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225                 230


<210> 41
<211> 213
<212> PRT
<213> Nicotiana tabacum

<400> 41
Met Ala Ile Lys Val His Gly Ser Pro Met Ser Thr Ala Thr Met Arg
1               5                   10                  15


Val Ala Ala Cys Leu Ile Glu Lys Glu Leu Asp Phe Glu Phe Val Pro
            20                  25                  30


Val Asp Met Ala Ser Gly Glu His Lys Lys His Pro Tyr Leu Ser Leu
        35                  40                  45


Asn Pro Phe Gly Gln Val Pro Ala Phe Glu Asp Gly Asp Leu Lys Leu
    50                  55                  60


Phe Glu Ser Arg Ala Ile Thr Gln Tyr Ile Ala His Val Tyr Ala Asp
65                  70                  75                  80


Asn Gly Tyr Gln Leu Ile Leu Gln Asp Pro Lys Lys Met Pro Ser Met
                85                  90                  95


Ser Val Trp Met Glu Val Glu Gly Gln Lys Phe Glu Pro Pro Ala Thr
            100                 105                 110


Lys Leu Thr Trp Glu Leu Gly Ile Lys Pro Ile Ile Gly Met Thr Thr
            115                 120                 125


Asp Asp Ala Ala Val Lys Glu Ser Glu Ala Gln Leu Ser Lys Val Leu
        130                 135                 140


Asp Ile Tyr Glu Thr Gln Leu Ala Glu Ser Lys Tyr Leu Gly Gly Asp
145                 150                 155                 160


Ser Phe Thr Leu Val Asp Leu His His Ile Pro Asn Ile Tyr Tyr Leu
            165                 170                 175


Met Ser Ser Lys Val Lys Glu Val Phe Asp Ser Arg Pro Arg Val Ser
            180                 185                 190

Ala Trp Cys Ala Asp Ile Leu Ala Arg Pro Ala Trp Val Lys Gly Leu
        195                 200                 205

Glu Lys Leu Gln Lys
    210

<210> 42
<211> 222
<212> PRT
<213> Zea mays

<400> 42
Met Ala Pro Leu Lys Leu Tyr Gly Met Pro Leu Ser Pro Asn Val Val
1               5               10                  15

Arg Val Ala Thr Val Leu Asn Glu Lys Gly Leu Asp Phe Glu Ile Val